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51

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/827,820	04/06/2001	Kiichirou Wakamatsu	12894/004001/56059-US	6362

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EXAMINER

DEAN, RAYMOND S

ART UNIT	PAPER NUMBER
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2684

DATE MAILED: 08/03/2004

7

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/827,820

Applicant(s)

WAKAMATSU, KIICHIROU

Examiner

Raymond S Dean

Art Unit

2684

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 - 4 and 6 - 16 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1 - 4 and 6 - 16 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 2.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments, see amendment filed May 24, 2004 with respect to the drawings have been fully considered and are persuasive. The objection to said drawings therefore has been withdrawn.

Applicant's arguments, see amendment, filed May 24, 2004 with respect to the rejection(s) of claim(s) 1, 4, 5, 8, 9, 11, and 14 - 16 under 35 U.S.C. 102(e) as being anticipated by Naito et al. (2001/0005686) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of an updated search.

Applicant's arguments, see amendment, filed May 24, 2004 with respect to the rejection(s) of claim(s) 2 and 10 under 35 U.S.C. 103(a) as being unpatentable over Naito et al. (2001/0005686) in view of Willey (6,041,241) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of an updated search.

Applicant's arguments, see amendment, filed May 24, 2004 with respect to the rejection(s) of claim(s) 3 under 35 U.S.C. 103(a) as being unpatentable over Naito et al. (2001/0005686) in view of Nonogaki (6,625,478) have been fully considered and are not persuasive. Naito teaches a method of informing the user of the battery capacity through a warning signal, which can be a warning

Art Unit: 2684

sound through a speaker (Section 0024, Section 0027 lines 12 – 17). A typical speaker in a portable information terminal such as a cellular phone is an earphone.

Applicant's arguments, see amendment, filed May 24, 2004 with respect to the rejection(s) of claim(s) 6 and 7 under 35 U.S.C. 103(a) as being unpatentable over Naito et al. (2001/0005686) in view of Nonogaki (6,625,478) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of an updated search.

Applicant's arguments, see amendment, filed May 24, 2004 with respect to the rejection(s) of claim(s) 12 and 13 under 35 U.S.C. 103(a) as being unpatentable over Naito et al. (2001/0005686) in view of Cathey et al. (6,201,977) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of an updated search.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 2684

3. Claims 1, 2, 4, 8 – 11, and 14 - 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Naito et al. (US 2001/0005686) in view of Reichelt (6,427,072).

Regarding Claim 1, Naito teaches a mobile phone powered by a battery having a communication function and an additional function (Abstract, Figure 1, Section 0020) the mobile phone comprising: means for determining whether a level of a battery capacity is lower than a threshold level for permitting operation of the additional function (Section 0007, Section 0008, Section 0009); and means for informing a user of restriction of the additional function when the battery capacity is lower than the threshold level (Section 0024, Section 0027).

Naito does not teach a means for detecting a signal for initializing operation of the additional function; and means for informing a user of restriction of the additional function when the signal for initializing operation of the additional function is detected.

Reichelt teaches a means for detecting a signal for initializing operation of the additional function (Column 7 lines 49 – 62, the additional function is the non-emergency call capability, in order for the warning and explanation alert to be activated there must be an inherent detection of a initialization of the non-emergency call function); and means for informing a user of restriction of the additional function when the signal for initializing operation of the additional function is detected (Column 7 lines 49 – 62).

Naito and Reichelt both teach a portable information terminal with power conservation capability thus it would have been obvious to one of ordinary skill in

Art Unit: 2684

the art at the time the invention was made to use the means for detecting an initialization signal and means for informing a user of restriction when said initialization signal is detected as taught above in Reichelt in the portable information terminal of Naito for the purpose of preventing the user of said terminal from being in an emergency, including a life or death emergency, in which their terminal is disabled because of operation of said terminal for non-emergency calls that depleted the battery power supply beneath the minimum absolute limit required to make any calls including emergency calls as taught by Reichelt.

Regarding Claim 2, Naito in view of Reichelt teaches all of the claimed limitations recited in Claim 1. Reichelt further teaches wherein the informing means includes means for inquiring user's intention whether to operate the additional function when the battery capacity is lower than the threshold level (Column 5 lines 24 – 34, Column 7 lines 65 – 67, Column 8 lines 1 – 3, the user has the option to invoke/not invoke an override function in order to make a non-emergency call).

Regarding Claim 4, Naito teaches a mobile phone powered by a battery having a communication function and an additional function (Abstract, Figure 1, Section 0020), the mobile phone comprising: first means for determining whether a battery capacity is lower than a first level; means for informing a user that the battery capacity is lower than the first level; first means for restricting operation of the additional function (Section 0026, Section 0027, each battery charge value is a level that corresponds to an additional function); second means for determining

Art Unit: 2684

whether the battery capacity is lower than a second level which is lower than the first level; and second means for restricting operation of the communication function when the battery capacity is lower than the second level (Section 0026, each battery charge value is a level that corresponds to an additional function).

Naito does not teach a means for informing a user, when a signal for initializing operation of the additional function is inputted, that the battery capacity is lower than the first level and first means for restricting operation of the additional function when the user so requests.

Reichelt teaches a means for informing a user, when a signal for initializing operation of the additional function is inputted, that the battery capacity is lower than the first level (Column 5 lines 24 – 34, Column 7 lines 49 – 62, the additional function is the non-emergency call feature) and first means for restricting operation of the additional function when the user so requests (Column 7 lines 65 – 67, Column 8 lines 1 – 3, the user has the option to invoke/ not invoke an override function in order to make a non-emergency call).

Naito and Reichelt both teach a portable information terminal with power conservation capability thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the means for informing a user and first means for restricting operation of the additional function as taught above in Reichelt in the portable information terminal of Naito for the purpose of preventing the user of said terminal from being in an emergency, including a life or death emergency, in which their terminal is disabled because of operation of said terminal for non-emergency calls that depleted the battery power supply

Art Unit: 2684

beneath the minimum absolute limit required to make any calls including emergency calls as taught by Reichelt.

Regarding Claim 8, Naito in view of Reichelt teaches all of the claimed limitations recited in Claim 4. Reichelt further teaches a means for detecting whether the additional function is being operated wherein the first restricting means terminates the operation of the additional function when the additional function is being operated (Column 7 lines 49 – 52, in order for the warning alert and/or disablement to be activated there must be an inherent detection of a initialization of the non-emergency call function).

Regarding Claim 9, Naito in view of Reichelt teaches all of the claimed limitations recited in Claim 4. Naito further teaches a means for detecting whether the additional function is being operated wherein: the informing means includes a visual display panel for displaying the restriction of the additional function thereon (Section 0024, Section 0027); and the restriction is displayed on the display panel as a sign to prohibit the operation of the additional function when the additional function is not being operated (Figure 2, Section 0029, Section 0030, Section 0031, Section 0032, Section 0034, the battery charge detecting unit checks the charge level of the battery and compares said charge level to the power supply limiting values at constant intervals therefore whenever there is a charge level that is lower than any of the power supply limiting values there will be a warning sign informing the user of the mobile phone regardless of whether or not the additional functions are in a operation mode).

Art Unit: 2684

Regarding Claim 10, Naito in view of Reichelt teaches all of the claimed limitations recited in Claim 9. Reichelt further teaches means for selecting either to follow or not to follow the prohibiting sign displayed (Column 7 lines 65 – 67, Column 8 lines 1 – 3, the user has the option to invoke/ not invoke an override function in order to make a non-emergency call).

Regarding Claim 11, Naito in view of Reichelt teaches all of the claimed limitations recited in Claim 4. Naito further teaches a third means for determining after the first restricting means restricts the additional function, whether the battery capacity is higher than a third level which is higher than the first level; and means for canceling the restriction of the additional function when the battery capacity is higher than the third level (Section 0026, since the additional function can be restricted when the battery charge is below the power supply limiting value of said additional function the corollary of unrestricting said additional function when the battery charge is higher than said power supply limiting value is also true).

Regarding Claim 14, Naito teaches a mobile phone powered by a battery having a communication function and at least one additional function (Abstract, Figure 1, Section 0020), the mobile phone comprising: first means for determining whether a battery capacity is lower than a first level; means for informing to a user that the battery capacity is lower than the first level when such is determined by the first determining means (Section 0026, Section 0027, each battery charge value is a level that corresponds to an additional function); second means for determining whether the battery capacity is lower than a

Art Unit: 2684

second level which is lower than the first level; and means for restricting operation of the communication function when the battery capacity is determined to be lower than the second level by the second determining means (Section 0026, each battery charge value is a level that corresponds to an additional function).

Naito does not teach a means for informing to a user, when a signal for initializing operation of the additional function is inputted, that the battery capacity is lower than the first level when such is determined by the first determining means.

Reichelt teaches a means for informing to a user, when a signal for initializing operation of the additional function is inputted, that the battery capacity is lower than the first level when such is determined by the first determining means (Column 7 lines 49 – 62, in order for the warning and explanation alert to be activated there must be an inherent determination of a initialization of the non-emergency call function).

Naito and Reichelt both teach a portable information terminal with power conservation capability thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the means for informing a user as taught above in Reichelt in the portable information terminal of Naito for the purpose of preventing the user of said terminal from being in an emergency, including a life or death emergency, in which their terminal is disabled because of operation of said terminal for non-emergency calls that depleted the battery

Art Unit: 2684

power supply beneath the minimum absolute limit required to make any calls including emergency calls as taught by Reichelt.

Regarding Claim 15, Naito in view of Reichelt teaches all of the claimed limitations recited in Claim 14. Naito further teaches a means for restricting operation of only the additional function when the battery capacity is determined to be lower than the first level by the first determining means (Section 0026).

Regarding Claim 16, Naito in view of Reichelt teaches all of the claimed limitations recited in Claim 14. Naito further teaches an informing means that informs to the user that operation of only the additional function is restricted when the battery capacity is determined to be lower than the first level by the first determining means (Section 0024, Section 0026, Section 0027).

4. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Naito et al. (US 2001/0005686 A1) in view of Nonogaki (US 6,625,478 B1).

Regarding Claim 3, Naito teaches a mobile phone powered by a battery having a communication function and an additional function (Abstract, Figure 1, Section 0020), the mobile phone comprising: means for determining whether a level of a battery capacity is lower than a threshold level for permitting operation of additional function (Section 0007, Section 0008, Section 0009); and means for terminating operation of the additional function and for informing a user of that effect through an earphone when the battery capacity becomes lower than the threshold level during a period in which the additional function is being operated (Section 0007, Section 0008, Section 0009, Section 0024, Section 0027, a typical

Art Unit: 2684

speaker in a portable information terminal such as a cellular phone is an earphone).

Naito does not specifically teach an additional function that is a music sounds producing function.

Nonogaki teaches a music sounds producing function (Column 4 lines 7 – 15).

Naito and Nonogaki both teach a mobile terminal with multiple functions thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the music producing function taught in Nonogaki in the mobile terminal of Naito for the purpose of creating a mobile terminal with multimedia capability as taught by Nonogaki.

5. Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Naito et al. (US 2001/0005686) in view of Reichelt (6,427,072) as applied to claim 4 above, and further in view of Nonogaki (US 6,625,478 B1).

Regarding Claim 6, Naito in view of Reichelt teaches all of the claimed limitations recited in Claim 4. Naito in view of Reichelt does not teach the additional function is a function for producing music sounds.

Nonogaki teaches an additional function that is a function for producing music sounds (Column 4 lines 7 – 15).

Naito in view of Reichelt and Nonogaki teach a mobile terminal with multiple functions thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the music producing function taught

Art Unit: 2684

in Nonogaki in the mobile terminal in Naito in view of Reichelt for the purpose of creating a mobile terminal with multimedia capability as taught by Nonogaki.

Regarding Claim 7, Naito in view of Reichelt and in further view of Nonogaki teaches all of the claimed limitations recited in Claim 6. Naito further teaches an informing means that informs the user of the restriction of an additional function as warning sounds superimposed (Section 0024, Section 0026, Section 0027, since the only output for the audible warning is the speaker said audible warning would inherently be superimposed on any other audio signal that is transmitted simultaneously). Nonogaki further teaches a music sounds producing function (Column 4 lines 7 – 15).

6. Claims 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Naito et al. (US 2001/0005686) in view of Reichelt (6,427,072) as applied to claim 4 above, and further in view of Cathey et al. (US 6,201,977).

Regarding Claim 12, Naito in view of Reichelt teaches all of the claimed limitations recited in Claim 4. Naito in view of Reichelt further teaches a first determining means and second determining means that determines the battery capacity (Section 0026, the first determining means determines when the battery charge is 80% and the second determining means determines when the battery charge is 20%).

Naito in view of Reichelt does not specifically teach a first and second determining means that determine the battery capacity based on a terminal voltage of the battery.

Art Unit: 2684

Cathey teaches a determining means that determines the battery capacity based on a terminal voltage of the battery (Column 3 lines 3 – 8, the sensing circuit inherently detects the voltage level of the battery so that it can be compared to the predetermined voltage level).

Naito in view of Reichelt and Cathey both teach a determining means that determines the battery capacity of a battery such that power conservation is maintained. It would therefore have been obvious to one of ordinary skill in the art at the time the invention was made to use the voltage level determining method taught in Cathey in the battery charge detecting unit of Naito in view of Reichelt such that there is an accurate measurement of the battery charge level of the battery in Naito in view of Reichelt as taught by Cathey.

Regarding Claim 13, Naito in view of Reichelt teaches all of the claimed limitations recited in Claim 11. Naito in view of Reichelt further teaches a first, second, and third determining means that determines the battery capacity (Section 0026, the first, second, and third determining means determine when the remaining battery charge becomes 80%, 50%, and 20%).

Naito in view of Reichelt does not specifically teach a first, second, and third means that determines the battery capacity based on a terminal voltage of the battery.

Cathey teaches a determining means that determines the battery capacity based on a terminal voltage of the battery (Column 3 lines 3 – 8, the sensing circuit inherently detects the voltage level of the battery so that it can be compared to the predetermined voltage level).

Art Unit: 2684

Naito in view of Reichelt and Cathey both teach a determining means that determines the battery capacity of a battery such that power conservation is maintained. It would therefore have been obvious to one of ordinary skill in the art at the time the invention was made to use the voltage level determining method taught in Cathey in the battery charge detecting unit in Naito in view of Reichelt such that there is an accurate measurement of the battery charge level of the battery in Naito in view of Reichelt as taught by Cathey.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Art Unit: 2684

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Raymond S Dean whose telephone number is 703-305-8998. The examiner can normally be reached on 7:00-3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay A Maung can be reached on 703-308-7745. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Raymond S. Dean
July 22, 2004



NAY MAUNG

SUPERVISORY PATENT EXAMINER